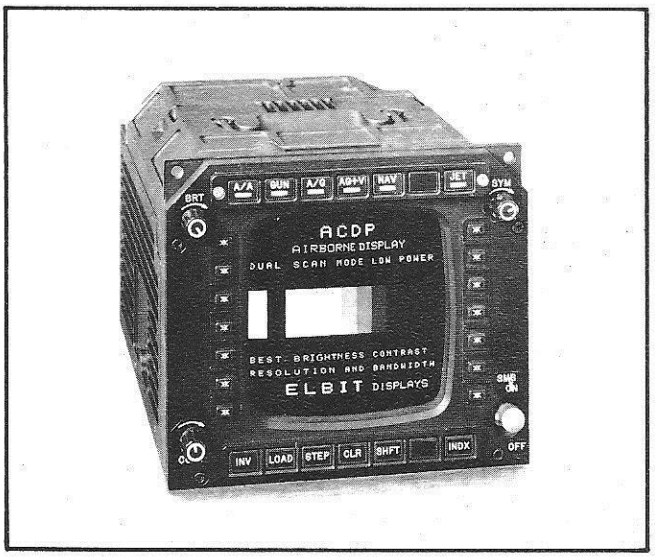
Elbit MILITARY PRODUCTS

ACDP



ARMAMENT CONTROL and DISPLAY PANEL ACDP

DESCRIPTION

Elbit's ACDP is a high-performance, airborne multi-function display. It displays a high quality video picture when provided with a composite video signal originating at any airborne source.

High brightness and high contrast ratio and resolution are perfectly matched for achieving a bright and clear picture under direct sunlight and severe environmental conditions. In addition to the picture controls, the front panel incorporates 28 pushbuttons that may be used by any available avionics system to perform any desired function.

The ACDP, with its large screen in combination with its small volume, low power requirements and high-quality image, is the optimal solution to any airborne display requirement.

FEATURES

- 4 x 4 inch, square, multi-function display
- High contrast and high resolution under severe ambient light conditions
- Dual scan modes, 875 lines and 525 lines, selectable
- Continuous operation at temperatures ranging from -54°C to +55°C, and intermittent operation at +71°C
- Solid-state circuitry
- High MTBF
- Low power requirements; fans or cooling air not required
- Multi-function panel with built-in computer interface
- Meets MIL-E-5400R, Class 1

SPECIFICATIONS

Display

- Cathode Ray Tube
  - 4 x 4 in. viewing area
  - Electromagnetic deflections; electrostatic focus; P43 phosphor with bonded bandpass contrast enhancement filter
- Brightness and Contrast
  - Brightness: 200 foot-lamberts minimum
- Contrast Ratio
  - 7:1 minimum at 10,000 foot-candles ambient
- Gray Scales
  - 6 shades of gray (minimum) at 10,000 foot-candles ambient, with a [2] ½ contrast between shades
- Raster
  - 525 line- and 875 line-pictures at 60Hz per frame
- Video Bandwidth
  - 30Hz to 20MHz, 3db point
- Resolution
  - MTF at 15% at 121 lines per inch
- Linearity
  - 5% maximum

SPECIFICATIONS (Cont'd)

- Jitter
  - 4 mils maximum
- Composite Video Input
  - 1 to 3 V_{pp}, per EIA-RS-170 and EIA-RS-343; military, industrial and broadcast formats

Physical

- Size
  - 14.73(H) x 17.52(W)x24.89(D) cm
- Weight
  - 6.5 kg

Electrical

- Power Input
  - 28VDC, 20W, 115VAC 400Hz single phase, 70W max. aircraft power, per MIL-STD-704B, Category B

CONTROL PANEL

The control panel contains the following controls and indicators:

- Brightness control
- Contrast control
- Symbology control (for external symbol generator use)
- ON/OFF switches (with additional poles for external use)
- 28 pushbutton switches with white legends and red illumination at night
- 7 annunciator lights, externally driven, within upper row switches

Legends may be modified to suit requirements.

ENVIRONMENTAL CONDITIONS

- Temperature Range
  - $-54^{o}C$ to $+55^{o}C$ continuous operation; intermittent operation to $+71^{o}C$
- Shock
  - 20 g's, 11 milliseconds
- Altitude
  - 50,000 feet - operating
- Vibration
  - 2 g's to 2,000Hz
- Humidity
  - 100% R.H.
- EMI
  - Per MIL-STD-461A
- Reliability
  - 1500 hr MTBF, per MIL-HDBK-271A
- Maintainability
  - Easily accesible circuit board assemblies; modular chassis assembly; self-contained, modular, encapsulated high-voltage power supply
  - Easily replaceable CRT assembly

ELBIT'S EXPERIENCE

- Development and production of airborne display units for F4 and Kfir aircraft
- Design based on operational experience

The Greatest Care and Skill, together with Combat Experience, Assure Quality and Reliability.

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Pub. No. EP81-0401